

REMARKS

Claims 1-5 and 7 stand rejected under 35 U.S.C. §102 (b) as being anticipated by United States Patent No. 5,835,721 to Donahue et al. Applicants respectfully traverse this rejection.

Applicants respectfully submit that the Donahue et al. reference fails to disclose all of the features of the present invention. More specifically, the Donahue et al. reference fails to disclose a data communication device that includes, *inter alia*, a transmission unit that is configured to transmit stored reply information, corresponding to a monitored connection between a data communication device and an external communication device, to an external communication device based on the monitoring result of the connection monitoring unit only if the transmission unit determines that the connection has been abnormally cut off, as defined in amended independent Claim 1.

Independent Claims 4 and 5 recite similar features, except that these claims are directed to a method and a computer readable medium.

One of the benefits of the present invention is that traffic between the server and multiple clients is reduced, when compared to prior art designs, because certain communications only occur when the connection between the server and a client has been abnormally cut off. For example, Applicants' Figure 9 shows a prior art system in which there is a communication between the commitment/rollback transmission section of each client and the commitment/rollback reception section of the server every time there is client access to the server, regardless of whether the connection is normally released or abnormally cut off. Thus, for example, Applicants' Prior Art Figure 9 shows that there are "n" communication links (where n is the number of clients) between the

commitment/rollback transmission sections ($14_1, 14_2 \dots 14_n$) and the commitment/rollback reception section 24.

In contrast, in the present invention, such as shown in Applicants' Figure 1, there is only a communication link between the transaction notification agent ($34_1, 34_2 \dots 34_n$) and the transaction guarantee section 44 when the connection is abnormally cut off. Thus, as can be seen in the example of Applicants' Figure 1, in which the communication between client 30_n and server 40 is abnormally cut off, there is only one communication link between transaction notification agent 34_n and the transaction guarantee section 44. Thus, comparing Figure 1 and Prior Art Figure 9, which each include "n" clients, one can see that the number of communication links between commitment/rollback transmission sections ($14_1, 14_2 \dots 14_n$) and the commitment/rollback reception section 24 is reduced from having one link for each client access to the server (Prior Art Figure 9) to having a communication link only when there is an abnormal cut off between transaction notification agent 34_n and transaction guarantee section 44 (Figure 1). Accordingly, it can be seen how the present invention reduces traffic when compared to the systems such as that shown in Prior Art Figure 9.

Turning now to the Donahue et al. reference, this reference fails to disclose a transmission unit that transmits reply information corresponding to the connection, as determined by the connection monitoring unit, to an external communication device only if the transmission unit determines that the connection between a data communication device and the external communication device has been abnormally cut off. In the Final Office Action, the Examiner relied upon column 9, lines 25-55 of Donahue et al. for satisfying the features of the independent claims. However, even assuming *arguendo* that

this section of Donahue et al. discloses other claimed features of the invention, it fails to disclose that the transmission unit transmits reply information corresponding to the connection, as determined by the connection monitoring unit, to an external communication device only if the transmission unit determines that the connection between a data communication device and the external communication device has been abnormally cut off. Instead, as can be seen in Figure 8 of Donahue et al., blocks 606 and 612 show that the target information is transmitted between the receiver and the sender both when the connection is cut off (block 612) and when the connection is operating normally (block 606). Thus, even assuming *arguendo* that the target information of Donahue et al. could be considered as the claimed "reply information corresponding to the connection," this information is not transmitted only when the connection between devices has been abnormally cut off. Accordingly, for at least this reason, Applicants respectfully request the withdrawal of this §102(b) rejection of independent Claims 1, 4 and 5 and associated dependent Claims 2, 3 and 7.

Claims 1-5 and 7 stand rejected under 35 U.S.C. §102 (e) as being anticipated by United States Patent No. 6,671,729 to Gordon et al. Applicants respectfully traverse this rejection.

Applicants respectfully submit that the Gordon et al. reference fails to disclose all of the features of the present invention. More specifically, the Gordon et al. reference fails to disclose a data communication device that includes, *inter alia*, a transmission unit that is configured to transmit stored reply information corresponding to the connection to an external communication device based on the monitoring result of the connection monitoring unit only if the transmission unit determines that the connection

has been abnormally cut off, as defined in amended independent Claim 1. Independent Claims 4 and 5 recite similar features, except that these claims are directed to a method and a computer readable medium.

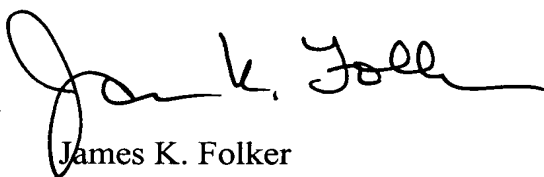
Even assuming *arguendo* that the information generated when monitoring the tunnel connection (as described in column 6, line 56, through column 7, line 22 of Gordon et al.) could be considered as the claimed reply information, this reference still fails to satisfy all of the features of the independent claims because this information is not transmitted between the host computer and the tunnel terminator only when the connection has been abnormally cut off. Instead, in Gordon et al., the information is transmitted only when the connection is normal, by either receiving heartbeat signals during a normal connection (column 7, lines 1-5) or receiving acknowledgement packets during a normal connection (column 7, lines 5-9). Accordingly, all of the features of independent Claims 1, 4 and 5 are not disclosed in the Gordon et al. reference. Thus, for at least this reason, Applicants respectfully request the withdrawal of this §102(e) of independent Claims 1, 4 and 5 and associated dependent Claims 2, 3 and 7.

In the Final Office Action, the Examiner asserted that column 7, line 60, through column 8, line 9, of the Gordon et al. reference disclose the claimed transmission unit. However, even assuming *arguendo* that the encrypted user identification and password can be considered as the claimed reply information, the independent claims are not satisfied because transmission of this information does not occur only when the connection has been abnormally cut off. Instead, this information is also transmitted when the connection is normal. Accordingly for this reason also, Applicants respectfully request the withdrawal of this §102(e) rejection of Claims 1-5 and 7.

For all of the above reasons, Applicants request reconsideration and allowance of the claimed invention. Should the Examiner be of the opinion that a telephone conference would aid in the prosecution of the application, or that outstanding issues exist, the Examiner is invited to contact the undersigned attorney.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By 
James K. Folker
Registration No. 37,538

October 17, 2007

Suite 2500
300 South Wacker Drive
Chicago, Illinois 60606
(312) 360-0080

Customer No. 24978
P:\DOCS\1924\65310\BS2033.DOC